

AMENDMENTS TO THE SPECIFICATION

Please replace Paragraph [0019] with the following paragraph:

[0019] Figure 2 is an isometric view of tooling plate 22 used in system 10 (shown in Figure 1). Tooling plate 22 is used to locate clamping blocks 16 on thin-walled tubing 34 for net length trim. Net length trim means that tubing 34 is trimmed or cut such that the length of tubing 34 extending beyond a distal face 38 of each clamping block ~~34~~ block 16 is effectively equal to one half the width of welding cassette 28, for example 0.750 inches. Tooling plate 22 includes at least one tubing identification number 40, also generically referred to as a part number, which identifies a specific piece of tubing 34. The various pieces of tubing 34 can have a variety of configurations that may include one or more bends in a single piece of tubing 34. Therefore, system 10 may include a plurality of tooling plates 22, each specifically designed for specific pieces of tubing 34 having a specific configuration which is identified on the tooling plate 22.

Please replace Paragraph [0020] with the following paragraph:

[0020] Tooling plate 22 also includes at least one tubing outline 46 coinciding with each tubing identification number 40. Each tubing outline 46 is used to properly orient for trimming the specific piece of tubing 34 identified by tubing identification number 40 when the piece of tubing 34 is mounted on tooling plate 22. Each piece of tubing is mounted on tooling plate 22 using clamping blocks 16. Clamping blocks 16 clamp around each piece of tubing 34 and are connected to tooling plate 22 using connectors (not shown) such as bolts. In addition, pieces of tubing 34 having a bend require at least one saddle 52 placed under the tubing 34 and pivotally mounted to tooling plate 22. Pieces of tubing 34 having a bend must be supported in a minimum of three places to properly clock, or rotationally orient, the tubing 34 in clamping block 16. Straight pieces of tubing 34 clamped to tooling plate 22 may not require the use of saddles 52. Saddles 52 also control lateral shift of tubing 34 as tubing 34 is being placed in clamping blocks 16, thereby assuring that a bend in tubing 34 is properly positioned between clamping blocks 16. Saddles 52 are removably and pivotally mounted to tooling plate 22 using any suitable connecting means, such as pivot pins or bolts, and do not need to be removed from tooling plate 22 when tooling plate 22 is not

in use. ~~Cradles~~ Saddles 52 are pivotally mounted to allow ~~cradles~~ saddles 52 to take up angle tolerance of bends in tubing 34.

Please replace Paragraph [0021] with the following paragraph:

[0021] Additionally, tooling plate 22 includes a plurality of bullet nose pins 58 and a plurality of connector receivers 64. Clamping blocks 16 ~~[[and]]~~ are positioned on tooling plate 22 using the bullet nose pins 58 and then mounted to tooling plate 22 using connector receptors 64. Connector receptors 64 couple, mate, or interlock with connectors (not shown) thereby mounting clamping blocks 16 to tooling plate 22. In one preferred embodiment, connector receptors 64 are threaded holes and the connectors are bolts that extend through holes in clamping blocks 16 and are threaded into connector receptors 64. However, the connectors can be any suitable connector that will securely couple, or mount, clamping blocks 16 to tooling plate 22. For example the connectors could be snaps and connector receptors 64 could be snap receptors, or the connectors could be buckles or any type of clamps and the connector receptors could be the mating components of the buckles or clamps.

Please replace Paragraph [0026] with the following paragraph:

[0026] Figure 4 is an isometric view of an automated cutting machine 104 included in an alternate embodiment of system 10 (shown in Figure 1). Cutting machine 104 includes a parting tool 106, an index plate 108, a hole 110 in index plate 108, and pneumatic clamps 112. Cutting machine 104 uses parting tool 106 to automatically cut tubing 34 to a predetermined length with a high level of precision and such that tubing 34 needs no deburring after tubing 34 is cut. Tubing 34 is stably mounted to index plate 108 while parting tool 106 automatically rotates around the outside of ~~tubing-24~~ tubing 34, thereby cutting or trimming tubing 34.

Pease replace Paragraph [0027] with the following paragraph:

[0027] A top surface 114 of index plate 108 is located a distance above a parting tool top surface 116 effectively equal to half the width of welding cassette 28, for example 0.750 inches. Clamping block 16 mates to top surface 114 for trimming of tubing 34. The tolerance in the distance between index plate top surface 114 and parting tool top surface 116 is small to assure that tubing 34 is precisely cut to length and that the cut will meet a maximum root gap requirement of 0.002 inches, required for

autogenous welding. Pneumatic clamps 112 are mounted to the top of the index plate 108 and hold clamping block 16 such that tubing 34 is in proper alignment during trimming. Index plate 108 includes index pins 118 that mate with clamping block index holes 90 (shown in Figure 3) to properly align clamping block 16 on index plate 108, and assure the tubing 34 is centered in the path of parting tool 106.